

AICUZ STUDY

CITIZEN'S BROCHURE



Charleston AFB, South Carolina
United States Air Force
October 1992

What is AICUZ?

Air Installation Compatible Use Zone (AICUZ) is a program concerning people; their comfort, safety, and quality of life. This pamphlet briefly summarizes the AICUZ study - an extensive analysis of the effects of noise, aircraft accident potential, compatible land use, and development upon present and future neighbors of Charleston Air Force Base. AICUZ seeks a cooperative understanding and a reasonable solution to this intricate problem.

Is there a problem?

Airfields attract development to immediately surrounding areas. In the absence of compatible land use controls, inappropriate uses may be made of property near or adjacent to the installation causing eventual conflicts between flight operations and landowners. Because land close to the Charleston AFB/Charleston International Airport Complex is subject to high noise levels and aircraft accident potentials, certain types of development are not suitable.

What has been done?

Charleston AFB has attempted to be a good neighbor by restricting flying activities that could adversely affect its neighbors. For example, practice circling approaches are normally conducted between the hours of 7:00 AM and 11:00 PM. Any such operations conducted during other hours must be pre-approved by the installation commander. Other actions include establishing a 2,000 foot minimum pattern altitude; prohibiting, when possible, all overflights of identified historic sites and hospitals; and limiting maximum power takeoffs. Flight pattern altitudes and the runway approach angles have been adjusted over the years in an effort to reduce noise impacts while maintaining safe operations. The base has demonstrated a spirit of cooperation by participating with communities in their local planning processes. Continued cooperation by Charleston AFB, Charleston Aviation Authority, local governments and the local populace will further reduce potential land use conflicts. This action will help ensure that future land use is compatible and beneficial.

What are the benefits?

In addition to protecting the public safety and health, primary benefits include protecting the taxpayer's investment in national defense provided by Charleston AFB and protecting economic benefits to the surrounding communities generated by airfield activities and employment. The local economy is enhanced by Charleston AFB's expenditures for salaries, contracts, construction, retirement pay, tuition, aid to schools, health insurance payments, and off-base accommodations for travelers. Charleston AFB employs over 9,000 people with an annual payroll of over \$230 million. Through service and construction contracts, an additional \$86 million enter the local economy. While shrinking budgets challenge the leadership at Charleston AFB, the base continues to be a strong partner in the economic future of the local communities and Berkeley, Charleston, and Dorchester Counties.

Why AICUZ now?

The Trident area is growing at a rapid pace. Land use development in the vicinity of the base is ongoing. Modifications to flight operations at Charleston AFB have resulted in changes to the noise contours outlined in the 1977 AICUZ report. Information provided in the 1992 AICUZ report is intended to offer assistance to those planning the future of the Trident area. By using the updated AICUZ map and information provided in the AICUZ study, neighboring communities are better equipped to make land use decisions and adopt land use controls which are compatible with Charleston AFB, yet able to accommodate growth.

What does AICUZ mean to me?

AICUZ means protection of the public safety and health as well as protection of the Air Force's national defense mission. The AICUZ itself is a composite of many factors: average noise levels, aircraft flight paths and altitudes, accident potential, and land use and building construction standards. The noise and accident potential zones have been combined and displayed on the contour map. The clear zones and accident potential zones (APZs) are based upon statistical analysis of past DoD aircraft accidents. The clear zone, the area closest to the runway end, is the most hazardous. The overall risk is so high that the DoD generally acquires the land through purchase or easement to prevent development. APZ I is an area beyond the clear zone

that possesses a significant potential for accidents. While aircraft accident potential in APZs I and II does not warrant acquisition by the Air Force, land use planning and controls are strongly encouraged in these areas for the protection of the public. The numbers 65 dB through 80 dB indicate the average sound levels in decibels for a particular area using the Day-Night Average A-Weighted Sound Level (DNL) metric for describing the noise environment. An additional constraint involves areas which the Federal Aviation Administration and DoD have identified for height limitations. Air Force obstruction criteria are based upon those contained in FAA Regulation Part 77, Subpart C.

The following AICUZ map and generalized Land Use Charts provide a quick reference to the various noise and accident potential zones around Charleston AFB. More detailed information can be found in the Charleston AFB 1992 AICUZ Study, Volume I, including a complete list of Air Force recommended land uses for each area.

COMPATIBILITY CHART*

LAND USE/AIRCRAFT NOISE

Generalized Land Use	DNL NOISE CONTOURS (dB)			
	65-70	70-75	75-80	80+
Residential	No ¹	No ¹	No	No
Manufacturing	Yes	Yes	Yes	Yes
Transportation, Communications, and Utilities	Yes	Yes	Yes	No
Trade, Business, and Offices	Yes	Yes	Yes	No
Shopping Districts	Yes	Yes	Yes	No
Public and Quasi-Public Service	Yes	No	No	No
Recreation	Yes	Yes	No	No
Public Assembly	Yes	No	No	No
Agriculture and Mining	Yes	Yes	Yes	Yes

* This chart is for general information. Refer to Volume I, Figure 4 for specific land uses and guidelines.

¹ Unless sound attenuation materials are installed (see the complete AICUZ Report for particular attenuation requirements).

COMPATIBILITY CHART*
LAND USE/ACCIDENT POTENTIAL ZONES

ACCIDENT POTENTIAL ZONES			
Generalized Land Use	Clear Zone	APZ I	APZ II

Residential	No	No	Yes ¹
Manufacturing	No	Yes ²	Yes ²
Transportation, Communications, and Utilities	No	Yes ²	Yes ²
Trade, Business, and Offices	No	Yes ²	Yes ²
Shopping Districts	No	No	Yes ²
Public and Quasi-Public Service	No	No	Yes ²
Recreation	No	Yes ²	Yes ²
Public Assembly	No	No	No
Agriculture and Mining	No ³	Yes ²	Yes ²

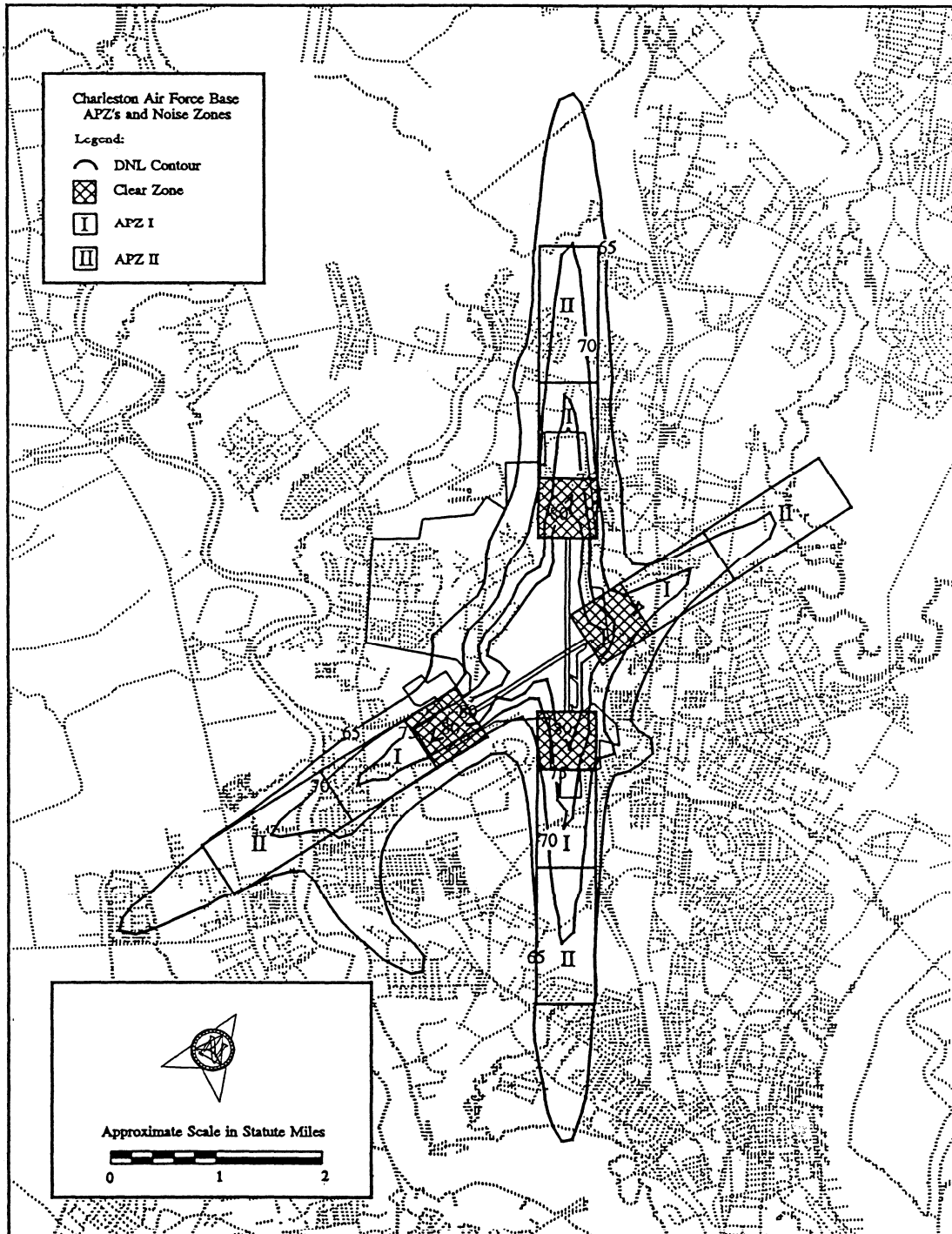
* This chart is for general information. Refer to Volume I, Figure 4 for specific land uses and guidelines.

¹Suggested maximum density 1 dwelling unit per acre.

²Only limited low-density, low-intensity uses recommended.

³Except limited agricultural uses are permitted.

AICUZ MAP



The AICUZ report includes the following recommendations:

The AICUZ report should be adopted as an official guideline for future planning in the airfield environs.

Zoning ordinances should be adopted or modified, reflecting the compatible land uses outlined in the Charleston AFB AICUZ report.

Fair disclosure ordinances should be enacted to specify disclosure to the public those AICUZ items directly related to operations at Charleston AFB.

Height control of structures near flight paths should be regulated by incorporating AICUZ recommendations into zoning ordinances.

Comprehensive plans should include the land use recommendations of the AICUZ report.

Subdivision regulations should provide for rejection of new subdivisions not compatible with AICUZ land use objectives and provide controls for continued development in existing subdivisions.

Building Codes should be amended to require noise level reduction.

Capital improvement programs should be carefully reviewed to discourage incompatible land use patterns, with particular emphasis on utility extension planning.

The Joint Land Use Study (JLUS), involving all local governments having developmental jurisdiction within the AICUZ study area, should be developed, approved, and applied in all future land use decisions within areas affected by operations at Charleston AFB.

How can I help?

Historically, Lowcountry citizens and the personnel of Charleston AFB have worked together in cooperative and harmonious efforts to better serve the needs and desires of all concerned. Collectively - found solutions have maximized the benefits of Charleston AFB while minimizing annoyances. If the future of Charleston AFB is to be as bright as its past, surrounding community neighbors need to participate in achieving a suitable resolution of mutual concerns. We request your careful and considered review of the recommendations contained in Charleston AFB's AICUZ report.

Who prepared the AICUZ study?

The AICUZ report was developed by many concerned people at Charleston AFB under supervision of Headquarters United States Air Force and Headquarters Air Mobility Command. The complete report is available at Charleston AFB from the Public Affairs Office, and copies have been placed in local public libraries and are on file with the Berkeley, Charleston, and Dorchester County Recorders. Only the major points of the complete AICUZ report are included in this pamphlet.
